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Reverse transcription PCR and quantitative PCR analysis

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An abbreviated version of this protocol was published in Bone & Joint Research in May 2021

GNAQ knockdown promotes bone metastasis through epithelial-mesenchymal transition in lung cancer cells

DOI: 10.1302/2046-3758.105.BJR-2020-0262.R3

Detailed protocol

Reverse transcription PCR was carried out as follows: The amplification profile was 95°C for 5 min(denaturation), followed by 30 cycles at 95°C/30 s; 56°C/30 s[GNAQ] or 55°C/30 s[COL1, OSX] or 60°C/30 s[RUNX2, OPN]; 72°C/1 min(Annealing). Lastly, a final extension step was performed for 5 min at 72°C.
Quantitative PCR was carried out as follows: after an initial 5-minute enzyme activation step at 95°C, 40 amplification cycles were run, each consisting of 95°C for 15 s and 60°C for 30 s.

How to cite:（Readers should cite both the Bio-protocol preprint and the original research article where this protocol was used）

1. Seo, S. (2022). Reverse transcription PCR and quantitative PCR analysis. Bio-protocol Preprint. bio-protocol.org/prep1796.
2. Choi, J., Lee, Y. S., Shim, D. M., Lee, Y. K. and Seo, S. W.(2021). GNAQ knockdown promotes bone metastasis through epithelial-mesenchymal transition in lung cancer cells. Bone & Joint Research 10(5). DOI: 10.1302/2046-3758.105.BJR-2020-0262.R3

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